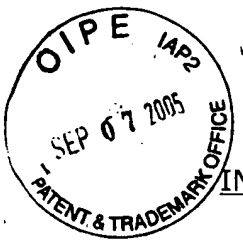
09-08-05



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application Serial No. 10/724,481

Applicants: **Martin et al.**

Group Art Unit: **3753**

Filing Date: **November 28, 2003**

Title: **LOW PROFILE HEAT EXCHANGER WITH NOTCHED TURBULIZER**

Attorney Docket No.: 60680-0771

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

In connection with the U.S. patent application identified above, Applicant wishes to draw to the Examiner's attention the following art. This Statement is being filed under Section 1.97(b).

Enclosed herewith is a List of References Cited by Applicant (PTO-1449) including a brief English explanation of the references not in the English language. Copies of the non-U.S. patent references are being submitted herewith. With respect to some of the references which are not in the English language, English translations exist and are attached to the reference itself. It is requested that all of the references listed therein be considered, made of record in the prosecution history of the application, and appear among the references cited on any patent to issue from the application.

Applicant believes that this Information Disclosure Statement is being submitted prior to the mailing date of the first Official Action in the above-identified matter, in accordance with 37 C.F.R. §1.97(b)(3). However, in the event that the first Office Action has already been mailed and Applicant has not yet received the Office Action, Applicant petitions for consideration of this Information Disclosure Statement and authorizes the Assistant Commissioner to deduct the fee of $180.00 required under 37 C.F.R. §1.97(c)(2) and 37 C.F.R. §1.17(p) from Deposit Account No. 13-2400. The Assistant Commissioner is further authorized to deduct any additional fees required in

connection with this Information Disclosure Statement from Deposit Account No. 13-2400 and to credit any overpayment to Deposit Account No. 13-2400.

EXECUTED at Mississauga, Ontario, Canada, this **31st** day of **August**, 2005.

Respectfully submitted,

By: _____
Peter R. Hammond
Registration No. 27,524

Encl.

RIDOUT & MAYBEE LLP
1 City Centre Drive, Suite 308
Mississauga, Ontario,
Canada L5B 1M2
Tel: (905) 276-2300

Form PTO-1449U.S. DEPARTMENT OF COMMERCE (Rev. 2-32)PATENT AND TRADEMARK OFFICE	Attorney Docket No. 60680-0771	Serial No. 10/724,481
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets if Necessary)	Applicants: Martin *et al*	
	Filing Date Nov 28, 2003	Group Art Unit: 3753

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date (MM/DD/YY)	Name	Class	Subclass	Filing Date if Appropriate (MM/DD/YY)
	1,049,695	1/7/1913	Garrison			
	1,318,875	10/14/1919	Hutchinson			
	1,775,819	9/16/1930	Fischer *et al*			
	1,996,622	4/2/1935	Lambert			
	2,039,593	5/5/1936	Hubbuch *et al*			
	2,154,216	4/11/1939	Savage			
	2,547,668	4/3/1951	Simelaar			
	2,796,239	6/18/1957	Holmes *et al*			
	2,814,470	11/26/1957	Peterson			
	2,981,520	4/25/1961	Chadburn			
	2,985,434	5/23/1961	Bering *et al*			
	3,024,003	3/16/1962	Speca *et al*			
	3,147,800	9/8/1964	Tadewald			
	3,650,310	3/21/1972	Childress			
	3,800,868	4/2/1974	Berkowitz			
	3,818,984	6/25/1974	Nakamura *et al*			
	4,002,200	1/11/1977	Raskin			
	4,072,188	2/7/1978	Wilson			
	4,085,728	4/25/1978	Tomchak			
	4,134,195	1/16/1979	Jacobsen *et al*			

Examiner Initial	Document Number	Date (MM/DD/YY)	Name	Class	Subclass	Filing Date if Appropriate (MM/DD/YY)
	4,478,277	10/23/1984	Friedman *et al*			
	4,574,876	3/11/1986	Aid			
	5,028,989	7/2/1991	Naganuma *et al*			
	5,099,311	3/24/1992	Bonde *et al*			
	5,159,529	10/27/1992	Lovgren *et al*			
	5,205,348	4/27/1993	Tousignant *et al*			
	5,228,511	7/20/1993	Boquel *et al*			
	5,232,066	8/3/1993	Schnelker			
	5,285,347	2/8/1994	Fox *et al*			
	5,316,077	5/31/1994	Reichard			
	5,381,510	1/10/1995	Ford *et al*			
	5,423,376	6/13/1995	Julien *et al*			
	5,490,559	2/13/1996	Dinulescu			
	5,495,889	3/5/1996	Dubelloy			
	5,829,517	11/3/1998	Schmid *et al*			
	5,901,037	5/4/1999	Hamilton *et al*			
	5,918,664	7/6/1999	Torigoe			
	5,934,364	8/10/1999	Chrysler *et al*			
	5,979,542	11/9/1999	Inoue			
	6,227,290	5/8/2001	Nishishita *et al*			
	6,305,463	10/23/2001	Salmonson			
	6,438,840	8/27/2002	Tavi et al			
	6,536,516	3/25/2003	Davies			
	6,729,389	5/4/2004	Ohashi			

FOREIGN PATENT DOCUMENTS

						Translation	
Examiner Initial	Document Number	Date	Country	Class	Sub-Class	Yes	No
	220,299	3/31/1942	CH				
	OS 2 201 559	7/19/1973	DE				
	33 28 229	10/10/1985	DE				
	298 03 166	5/20/1998	DE				
	0,805,328	11/5/1997	EP				
	0,807,756	11/19/1997	EP				
	0,826,874	3/4/1998	EP				
	0,890,810	1/13/1999	EP			X	
	0,907,061	4/7/1999	EP				
	1,189,606	10/5/1959	FR				
	1,534,246	7/26/1968	FR				
	2,748,800	11/21/1997	FR				
	2,769,082	4/2/1999	FR				
	2,772,838	6/25/1999	FR				
	2,774,462	8/6/1999	FR			X	
	2,774,463	8/6/1999	FR			X	
	2,774,635	8/13/1999	FR			X	
	2,778,973	11/26/1999	FR				
	2,785,377	5/5/2000	FR			X	
	61-66061	4/4/1986	JP				
	7-280,484	10/27/1995	JP				
	259,824	10/21/1926	UK				
	766,331	1/23/1957	UK				
	2,277,781	11/09/1994	UK				
	WO 94/~~23627~~ 23257	10/13/1994	WO				

						Translation	
Examiner Initial	Document Number	Date	Country	Class	Sub-Class	Yes	No
	WO 94/23449	10/13/1994	WO				
	WO 01/25711	4/12/2001	WO				
	WO 03/059,598	7/24/2003	WO				
	WO 03/71213	8/28/2003	WO				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

		U.S. publication No 2004/0238162 (Seiler et al) published December 2, 2004 and entitled HEAT EXCHANGER WITH FLOW CIRCUITING END CAPS
		U.S. publication No. 2005/0115700(Martin *et al*) published June 2, 2005 and entitled BRAZED SHEETS WITH ALIGNED OPENINGS AND HEAT EXCHANGER FORMED THEREFROM
		U.S. publication No. 2004/0069474 (Wu *et al*) published April 15, 2004 and entitled BAFFLED SURFACE COOLED HEAT EXCHANGER
		U.S. publication No. 2003/0164233 (Wu *et al*) published September 4, 2003 and entitled LOW PROFILE FINNED HEAT EXCHANGER
		U.S. publication No. 2003/0173068 (Davies *et al*) published September 18, 2003 and entitled FINNED PLATE HEAT EXCHANGER
		Fuel Cooling Needs for Advanced Diesel Engines by Michael Davies, John Burgers and Nick Kalman in SAE Technical Paper Series, May 19-22, 1997

EXAMINER DATE CONSIDERED

* Examiner: Initial citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EXPLANATION OF NON-ENGLISH REFERENCE

CH 220,299 — This patent shows a rectangular, generally flat heat exchanger which has a serpentine member that extends between outer sidewalls. Vents appear to be located at opposite ends of the heat exchanger.

DE OS 2,201,559 — This reference teaches a flat type heat exchanger with rectangular sides and a folded internal wall that forms multiple passageways. These passageways are closed at their opposite ends by end plates. There are inlet and outlet openings on one side of the heat exchanger.

DE 33 28 229 — This patent appears to teach a heat exchanger for heat exchange between two fluids passing through parallel, alternating flat tubular structures. The passageways extend through an elongate boxlike structure that forms the external walls.

FR 1,189,606 — This patent shows a heat exchanger with a base plate and a shaped cover plate and a turbulizer arranged between these two plates. Inlet and outlet connections are attached to the cover plate.

FR 1,534,246 — This patent teaches a finned member that has a tubular core from which the fins extend radially. End sections of each main fin are bent at different angles. This finned member is mounted on a hollow shaft as shown in Figure 4.

JP 61-66061 — This patent teaches a heat exchanger with upper and lower plate sections through which fluid passageways extend. These plates are interconnected along one side edge. The bottom plate is formed with a series of parallel fins that extend downwardly.

JP 7-280484 — This patent illustrates a stacked plate heat exchanger that can be fitted with turbulizer members shown in Figure 15. On one side of a pair of plates forming a tubular member, there can be arranged a corrugated fin structure as shown in Figure 18.

EP 0 805 328 — This patent describes a heat exchanger that can be made from a series of side-by-side plates and frame members (see Figure 1).

EP 0 807 756 — This patent shows various plate and finned members for use with fuel lines for heat exchange.

FR 2,748,800 — A heat exchanger is shown having adjacent plates with angled slots therein that criss-cross to define flow channels therebetween.

EP 0, 826,874 — This patent shows a heat exchanger with fins on one side and a labyrinth of grooves on the opposite side. A flat plate is located adjacent the grooves to define flow passages between the two plates.

DE 298 03 166 — This patent appears to illustrate a finned heat exchanger with two or more circular passageways arranged side-by-side and spaced apart by interconnecting webs. There are a series of fins integrally formed on one side of the heat exchanger.

EP 0 890 810 — This patent shows a fuel cooler that has an extruded or continuously cast main body containing a plurality of longitudinal internal flow channels. This main body has open ends. Another member with cooling ribs or fins is attached to the main body. Finally, end pieces or closing elements are used to close off the open ends of the main body and make the fuel flow in series through the fluid channels in the main body. (An English translation of the reference is attached to the reference).

FR 2 769 082 — This patent describes a heat exchanger comprising a series of stacked plates which are mounted in a housing. A turbulizer structure is apparently arranged between the stacked plates.

FR 2,772,838 — The fuel system consists of a fuel tank, supplying fuel to the injectors, with a fuel reflow circuit to return the fuel to the tank. The excess fuel emerging from the injector, is passed through a heat exchanger, which uses the flow of incoming air to cool the fuel, which is then returned to the fuel tank, and the air is supplied to the engine inlet.

EP 0 907 061 — This patent describes a heat exchanger which has a low profile and which is made from two plates that are spaced apart a short distance and that are arranged between two tubular tanks for fluid flow. Short parallel fins extend upwardly and downwardly from these plates (see Figure 7). (An English translation of the reference is attached to the reference).

FR 2,774,462 — This patent shows a heat exchanger having a corrugated plate attached to a flat plate to define flow channels therebetween. (An English translation of the reference is attached to the reference).

FR 2,774,463 — This patent also shows a fuel cooler having a serpentine tube attached to a plate. The plate has cut-outs, tabs and ramps formed in it for directing air flow. (An English translation of the reference is attached to the reference).

FR 2,774,635 — This patent shows a fuel cooler consisting of a serpentine tube attached to a louvered plate. (An English translation of the reference is attached to the reference).

FR 2,778,973 — This patent illustrates a low profile but curved heat exchanger wherein upper and lower plates are separated by a series of fluid flow passageways. The upper and lower plate sections have a series of short ribs formed externally thereon (see Figure 3). An end plate closes the end of the fluid passageways.

FR 2,785,377 — This patent shows a fuel cooler consisting of a serpentine tubular member mounted in a housing having a base and a cover. (An English translation of the reference is attached to the reference).

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10) Applicant(s): MARTIN ET AL.			Docket No. 60,680-771	
Application No. 10/724,481	Filing Date 11/28/2003	Examiner UNASSIGNED	Customer No. 26127	Group Art Unit 3753

Invention: LOW PROFILE HEAT EXCHANGER WITH NOTCHED TURBULIZER

I hereby certify that the following correspondence:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT, FORM PTO-1449, EXPLANATION OF NON-ENGLISH REFERENCES and copies of 29 FOREIGN PATENT DOCUMENTS and 1 TECHNICAL PAPER

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

09/07/2005
(Date)

MARY F. PELTIER
(Typed or Printed Name of Person Mailing Correspondence)

Mary F. Peltier
(Signature of Person Mailing Correspondence)

ED164797801US
("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.